

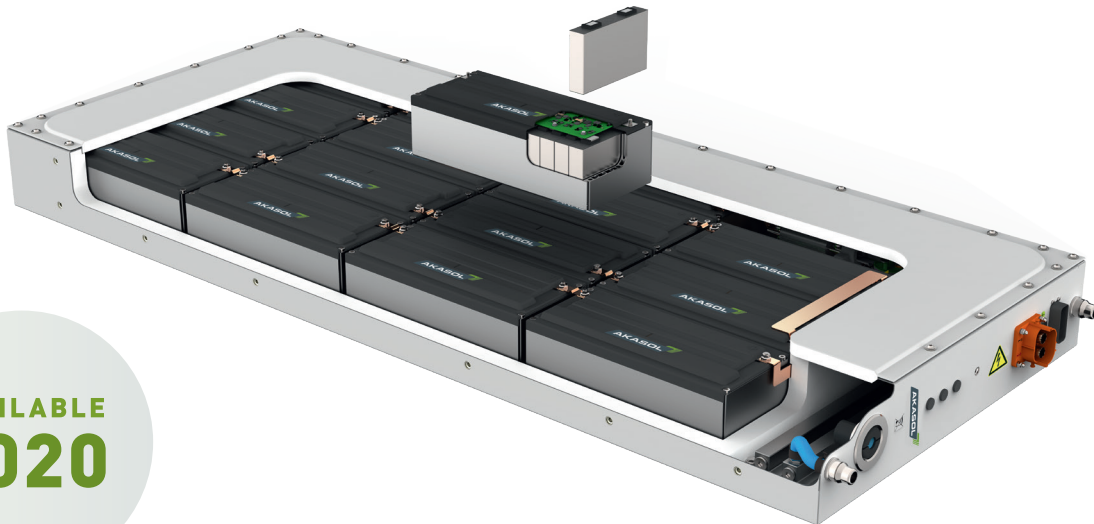
AKASYSTEM

15 OEM 50 PRC

150 kW (peak) • 50 kW (cont)
33 kWh • 655 V (nom) • 254 kg*

Typical product configuration. Appearance and interfaces may vary.

* All technical data depending on temperature, DoD/SOC and housing material



AVAILABLE
2020

CERTIFIED ACCORDING TO AUTOMOTIVE STANDARDS.

- > Development according to ISO 26262 up to ASIL C / EN 61508 SIL 2 possible
- > Tested safety (e.g. ECE R10, UN 38.3, ECE R100, DNV-GL) and "real world" experience
- > Multi-level short circuit protection on cell and system level
- > Additional operating safety due to redundant battery management system
- > Suitable for multi-string systems with monitoring on single-string and full system level
- > Protection classes IP67 up to IP6K9K possible
- > Robust and proven control unit BMS master (integrated multi-core safety CPU)
- > SOC / SOH analysis
- > Single cell voltage monitoring and balancing

SCALABLE. VALIDATED. DURABLE.

- > Freely scalable system with any number of OEM SYSTEMs
- > High energy and performance density
- > Easy system connectivity / ready-to-install (aligned connection points, standardized CAN bus, optional VDA / SAE cooling connections)
- > Excellent price-performance ratio as a result of the development for serial production
- > Liquid cooling for equal temperature distribution
- > Compact and lightweight solution, significant volume reduction due to liquid cooling
- > Long service life due to active and passive thermal management
- > Exceptionally robust, stainless steel battery case
- > Serial production, IATF 16949 compliant
- > Passive cell balancing
- > Maintenance-free operation

ELECTRICAL DATA	AKASOL SYSTEM 15 OEM 50 PRC	2P AKASOL SYSTEM 15 OEM 50 PRC	3P AKASOL SYSTEM 15 OEM 50 PRC	nP AKASOL SYSTEM 15 OEM 50 PRC
Cell connection in module	12s1p	12s1p	12s1p	12s1p
Capacity*	50 Ah	100 Ah	150 Ah	n*50 Ah
Energy*	33 kWh	66 kWh	99 kWh	n*33 kWh
Technology	Li-Ion NMC	Li-Ion NMC	Li-Ion NMC	Li-Ion NMC
Nominal voltage*	655 V	655 V	655 V	655 V
Voltage (max.)	756 V	756 V	756 V	756 V
Voltage (min.)	540 V	540 V	540 V	540 V
Discharging power max. (10s)**	150 kW	300 kW	450 kW	n*150 kW
Charging power max. (10s)**	100 kW	200 kW	300 kW	n*100 kW
Continuous power discharge (RMS)**	50 kW	100 kW	150 kW	n*50 kW
Continuous power charge**	45 kW	90 kW	135 kW	n*45 kW
Internal HV-Fuse	200 A	2 x 200 A	3 x 200 A	n*200 A
Power consumption in standby mode	8 W	16 W	24 W	n*8 W
Cycle life***	1,600...3,000 cycles	1,600...3,000 cycles	1,600...3,000 cycles	1,600...3,000 cycles

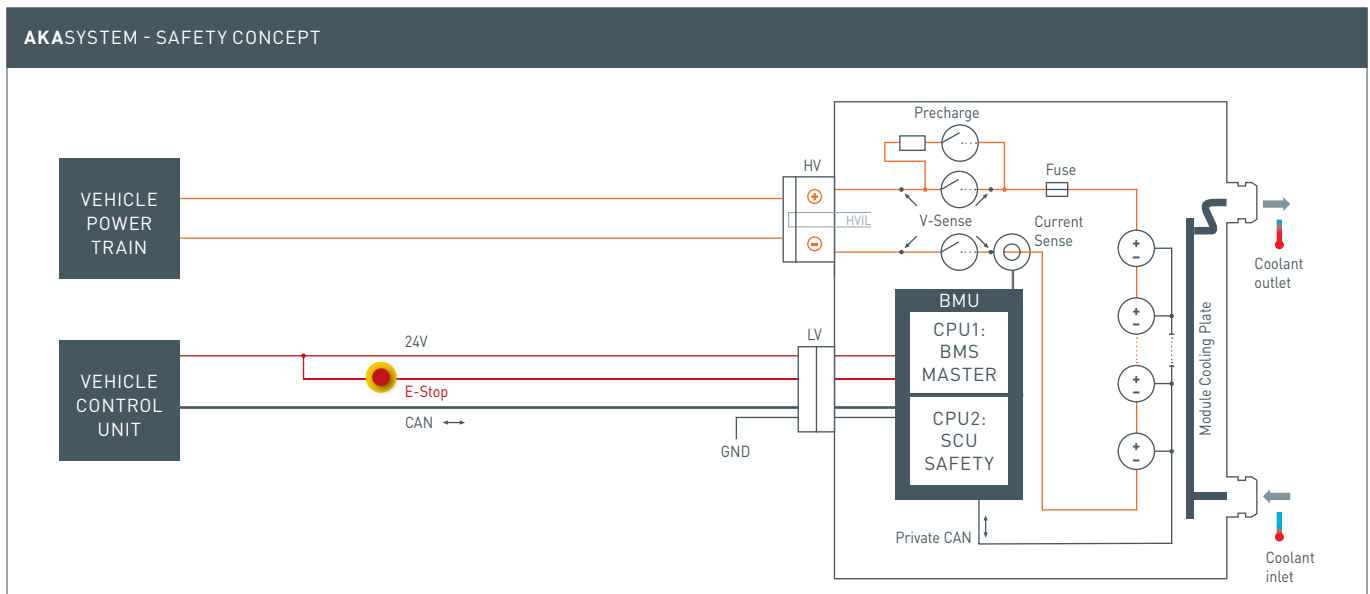
AKASOL SYSTEM n 15 OEM 50 PRC: freely scalable according to your application

* 0,33C reference discharge cycle **Depending on SOC and temperature ***Depending on individual use profile, especially DoD, temperature and power

MECHANICAL DATA	AKASOL SYSTEM 15 OEM 50 PRC	2P AKASOL SYSTEM 15 OEM 50 PRC	3P AKASOL SYSTEM 15 OEM 50 PRC	nP AKASOL SYSTEM 15 OEM 50 PRC
Coolant pressure max.	1.5 bar	1.5 bar	1.5 bar	1.5 bar
Typical coolant pressure drop (Water/glycol = 50/50)	400 mbar @ 300 l/h nom. 25 °C	400 mbar @ 600 l/h nom. 25 °C	400 mbar @ 900 l/h nom. 25 °C	400 mbar @ n* 300 l/h nom. 25 °C
Operating temperature range	-30 to 60 °C	-30 to 60 °C	-30 to 60 °C	-30 to 60 °C
Recommended operating temperature	15 to 35 °C	15 to 35 °C	15 to 35 °C	15 to 35 °C
Protection classes	IP67, IP6K9K	IP67, IP6K9K	IP67, IP6K9K	IP67, IP6K9K
Weight (incl. contactor box) typical****	230...260 kg	460...520 kg	690...780 kg	n*230...n*260 kg
Dimension (L x W x H) in mm (nominal)	1,700 x 700 x 150	1,700 x 700 x 305	1,700 x 700 x 460	1,700 x 700 x n*155

AKASOL SYSTEM n 15 OEM 50 PRC: freely scalable according to your application

****Depending on housing material



AKASOL AG
HEAD OFFICE AND R&D-CENTER

Landwehrstrasse 55
64293 Darmstadt | Germany
T +49 6151 800500 | info@akasol.com

HIGH PERFORMANCE BATTERY SYSTEMS.
MADE IN GERMANY WITH NEARLY 30 YEARS OF EXPERIENCE.

AKASOL is a leading European manufacturer of lithium-ion battery systems that are market ready to deliver safe, reliable and compliant power at scale for global electric transport. With nearly 30 years of German engineering, testing and manufacturing experience, AKASOL delivers safe battery systems for major players in the commercial transport sector.